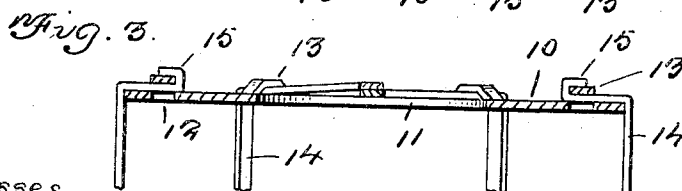
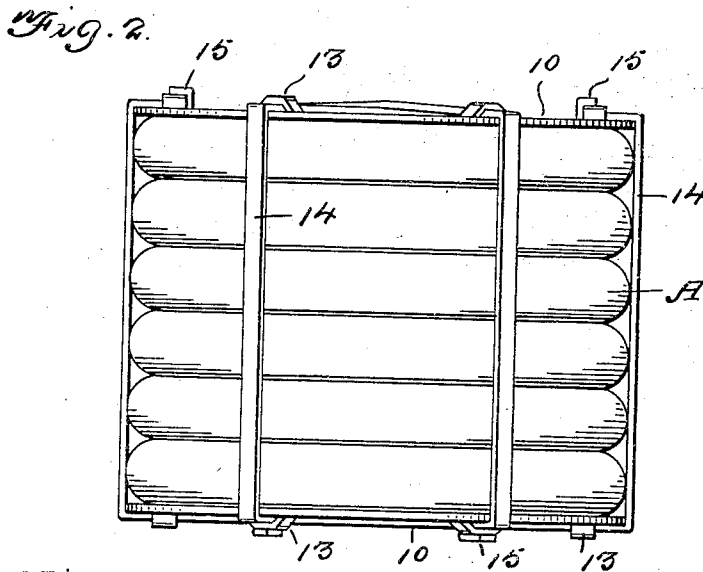
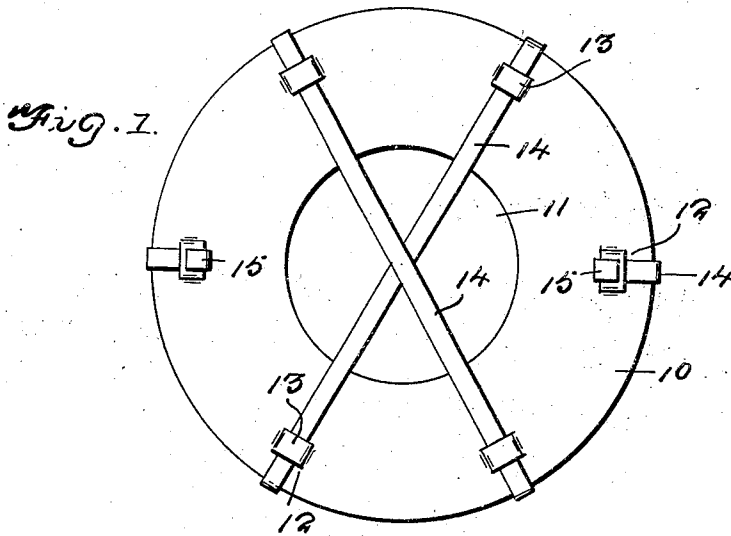


W. F. HARWOOD.
TIRE SHIPPING CRATE.
APPLICATION FILED OCT. 4, 1919.

1,355,042.

Patented Oct. 5, 1920.



Witnesses

E. R. Ruppert.

Inventor

W. F. Harwood

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

WALTER FRANK HARWOOD, OF RICHMOND, VIRGINIA.

TIRE-SHIPPING CRATE.

1,355,042.

Specification of Letters Patent.

Patented Oct. 5, 1920.

Application filed October 4, 1919. Serial No. 328,373.

To all whom it may concern:

Be it known that I, WALTER F. HARWOOD, a subject of the King of Great Britain, residing at Richmond, in the county of Henrico and State of Va., have invented new and useful Improvements in Tire-Shipping Crates, of which the following is a specification.

This invention relates to shipping receptacles or crates and has for its object the provision of a metallic shipping or packing crate adapted for securing together a plurality of automobile tires during transit, the device being formed entirely of metal and being consequently strong and durable, and the device being furthermore so constructed as to hold any desired number of tires from one to any number within reason.

Another and more important object is the provision of a device of this character formed in the nature of a binder and including a pair of circular metal heads of the same diameter as the tires to be shipped and further including metal straps which extend across one head along the sides of the stack of tires and which are secured to the other head, the ends of the metal straps being secured merely by clenching them against guide loops by striking them with a hammer or the like.

An additional object is the provision of a device of this character which will be extremely simple and inexpensive in manufacture, highly efficient in use, durable in service, and a general improvement in the art.

With the above and other objects and advantages in view the invention consists in the details of construction to be hereinafter more fully described and claimed and illustrated in the accompanying drawing in which—

Figure 1 is a plan view of my device,

Fig. 2 is a side elevation thereof, and

Fig. 3 is a detail cross sectional view through one of the heads, showing the clenching of the metal straps.

Referring more particularly to the drawing my device is shown as comprising a pair of circular metal heads 10 of the same diameter as tires A to be shipped. Each head is preferably cut away at its center, as shown at 11, for the purpose of saving weight. At spaced intervals each head 10 is provided with parallel slits 12 and the material between each pair of slits is forced laterally to provide loops 13. These heads 10 are dis-

posed at the top and bottom of the pile of tires A with the loops 13 arranged in the same relation.

In order to bind the stack of tires and the heads together, I make use of metallic straps 14 which have their intermediate portions threaded through the loops 13 on one head and which have their end portions extending through opposite loops in the other head. When the straps are threaded through the loops the terminals are bent upwardly at the adjacent loops 13 and are clenched by striking them with a hammer or the like. This clenched position of the ends is shown at 15. There must of course be an even number of loops 13 so that an even number of straps may be employed and it is preferable to provide at least six loops on each head so that at least three straps are employed and it will be observed that the arrangement is such that two of the straps extend entirely across one of the heads and the other remaining straps extend entirely across the other head so that these straps will serve to reinforce and strengthen the structure.

From the foregoing description and a study of the drawing it will be apparent that I have thus provided an extremely simple and efficient means for packing and binding automobile or other tires so that they will be retained in proper condition during shipment and be protected from danger of loss.

While I have shown and described the preferred embodiment of my invention it is of course to be understood that I reserve the right to make such changes in the form, construction, and arrangement of parts as will not depart from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. Packing and binding means for auto tires comprising a pair of flat circular heads disposed at the ends of a stack of tires and of the same diameter as the tires, and a plurality of metal straps having their intermediate portions extending across one head, extending along the sides of the stack of tires and having their extremities connected with the other head, the straps being in crossed relation.

2. Packing and binding means for tires comprising a pair of circular heads disposed at the ends of a stack of tires, said heads

being of the same diameter as the tires in the stack, a plurality of loops formed on each head, and metal straps having their intermediate portions extending through
5 said loops and arranged in crossed relation on one of said heads, said straps extending along the sides of the stack of tires and having their extremities extending through and clenched upon the loops in the other
10 head.

3. Packing and binding means for tires comprising a pair of circular heads disposed at the ends of a stack of tires, said head

being of the same diameter as the tires in the stack, a plurality of loops formed on each head, and metal straps having their intermediate portions extending through
15 said loops and arranged in crossed relation on one of said heads, said straps extending along the sides of the stack of tires and having their extremities extending through and clenched upon the loops in the other head,
20 each of said loops being formed by slipping and bending up the material of the head.

In testimony whereof I affix my signature. 25

WALTER FRANK HARWOOD.